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(54) DISK PLAYER AND A SELF-COMPENSATING DYNAMIC BALANCER BUILT-IN TYPE TURNTABLE, CLAMPER AND SPINDLE MOTOR WHICH ARE EMPLOYED TO THE BALANCER

**Abstract :**

The present invention discloses a disk player having a self-compensating dynamic balancer to restrict internal vibration by an eccentric weight and a self-compensating dynamic balancer built-in type turntable, clamper and spindle motor which are employed to the balancer. The self-compensation dynamic balancer is installed in the rotating substance inside a disk player and it is desirable that the balancer is formed in a turntable, clamper and/or rotator of the spindle motor as a single body. The self-compensating dynamic balancer is led-in-formed in the rotating substrate and the balancer includes at least one race having a rotational shaft as a center of rotation, a moving substrate positioned so that it can move freely in the race and a cover substrate for covering the opening of the race. Therefore, internal vibration causing the eccentric weight of the disk can be restricted by positioning the moving substrate far from the slip center by centrifugal force in case of rotation of the self-compensating dynamic balancer.

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심사청구 : 있음

(54) 디스크 플레이어 및, 이에 채용되는 자기보상형 밸런서 일체형 턴테이블, 자기보상형 밸런서 일체형  
클램퍼 및 자기보상형 밸런서 일체형 스핀들모터

**요약**

디스크의 편심질량에 의한 내부진동을 억제할 수 있도록 자기보상형 밸런서(Self-Compensating Dynamic Balancer)를 갖는 디스크 플레이어 및 이에 채용되는 자기보상형 밸런서 일체형 턴테이블 및 클램퍼 및 스핀들모터가 개시되어 있다.

상기한 자기보상형 밸런서는 디스크 플레이어 내부의 회전부재에 설치된다. 바람직하게는 턴테이블, 클램퍼 및/또는 스핀들모터의 회전자에 일체로 형성된다. 이 자기보상형 밸런서는 상기한 회전부재에 일체로 인입형성되며 회전축을 회전중심으로 하는 적어도 하나의 레이스와, 레이스 내부에서 자유롭게 움직일 수 있도록 높인 가동부재 및 레이스의 개구부를 덮어주는 커버부재를 포함하여 구성된다.

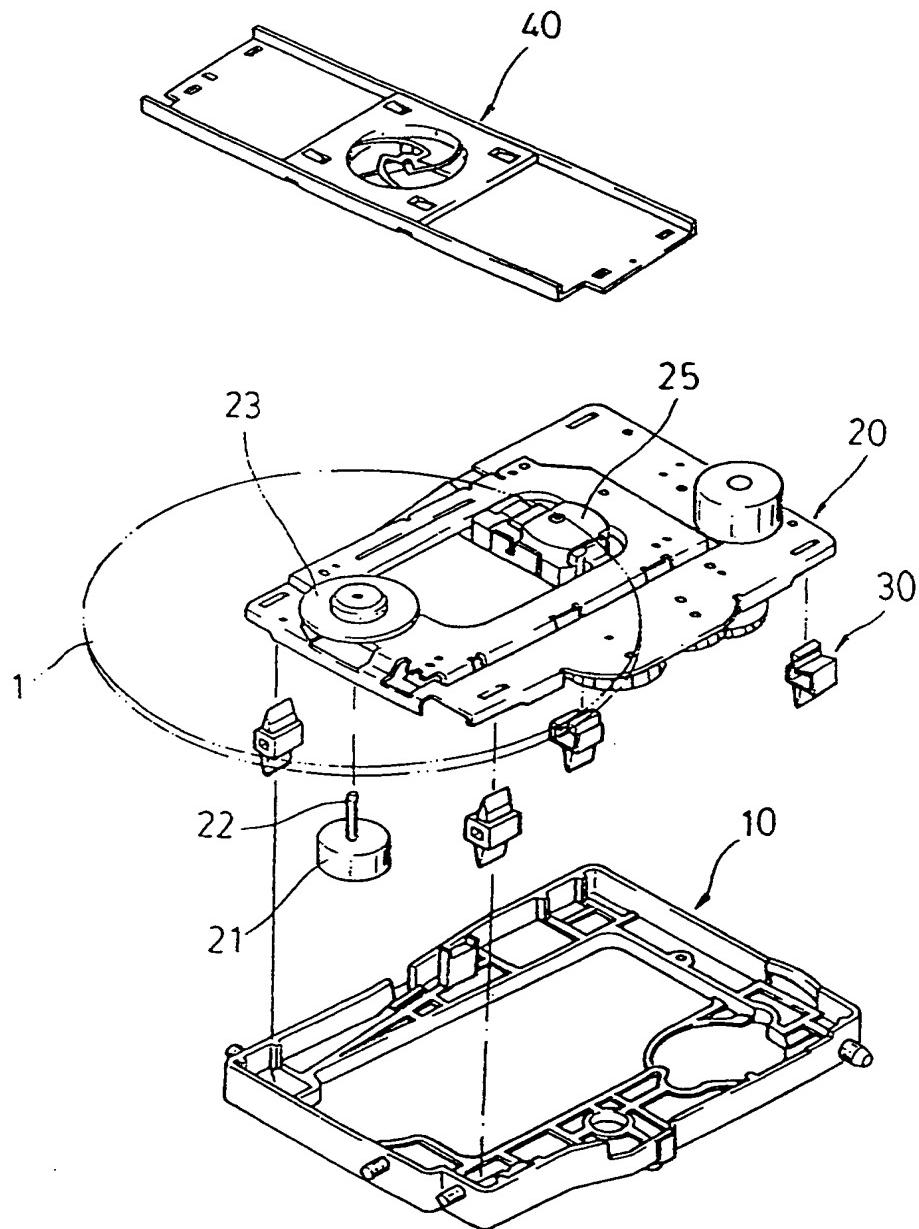
따라서, 자기보상형 밸런서의 회전시 가동부재가 원심력에 의해 공전중심으로부터 먼거리로 배치됨을 이용하여 디스크 편심질량에 기인하는 내부진동을 효과적으로 억제할 수 있다.

**대표도**

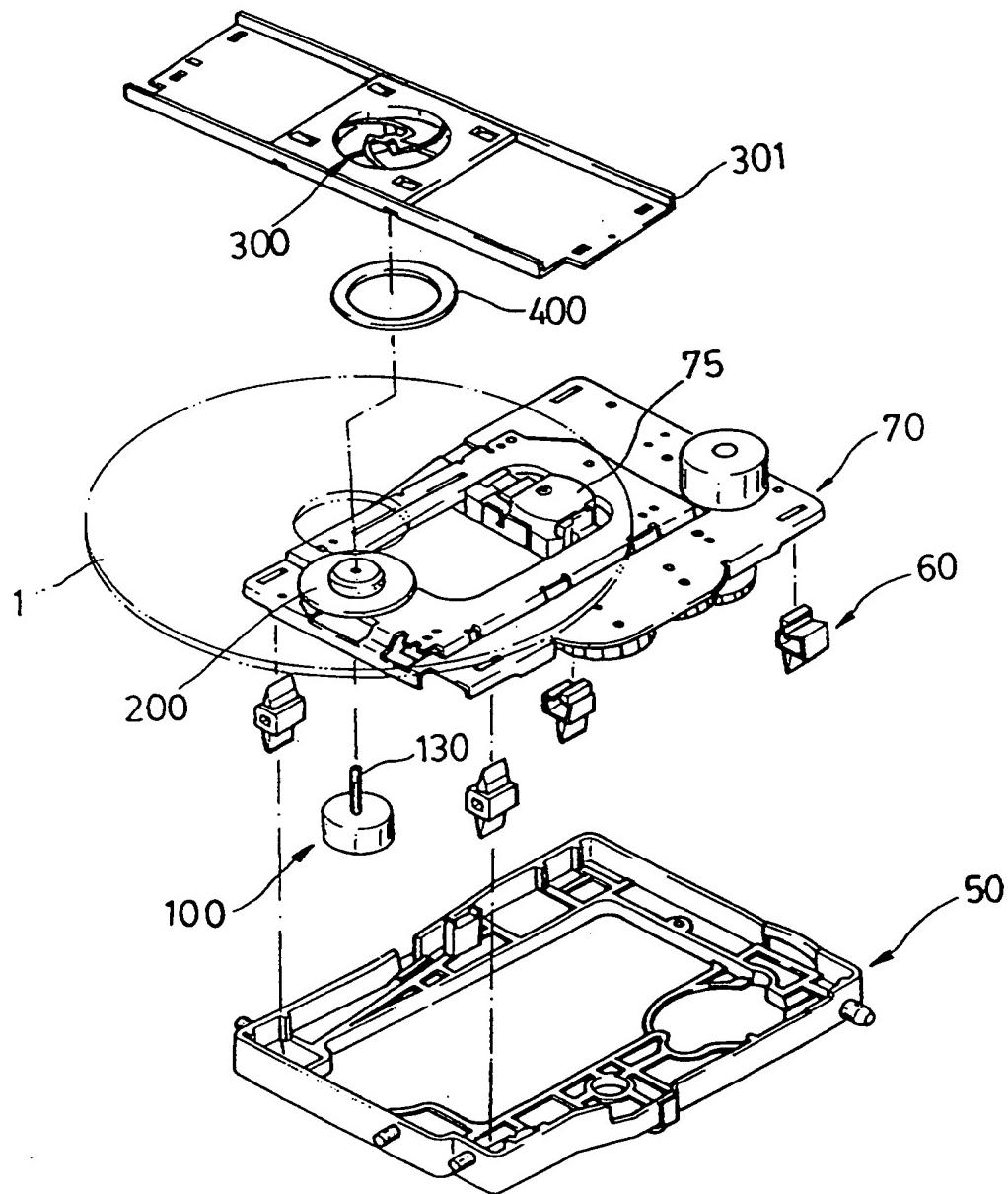
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**도면**

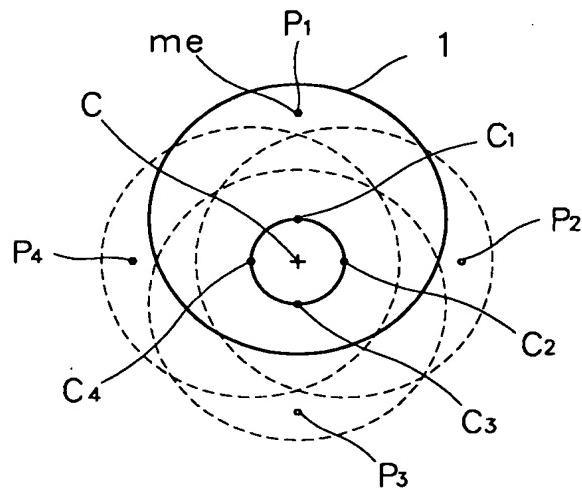
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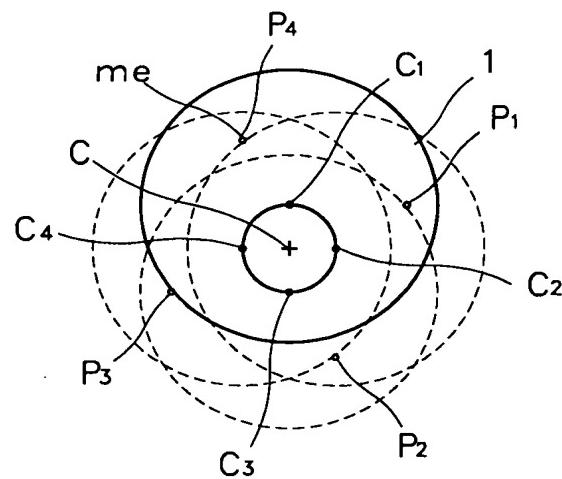
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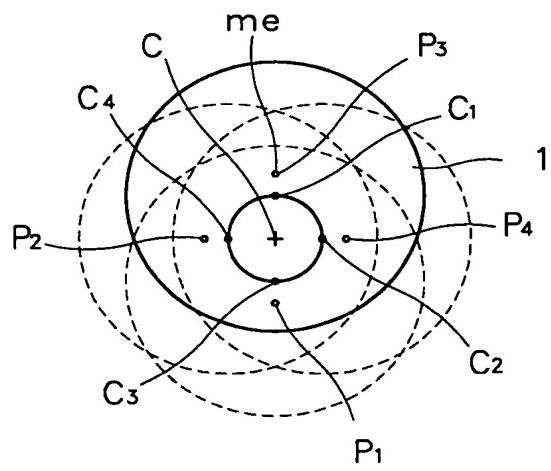
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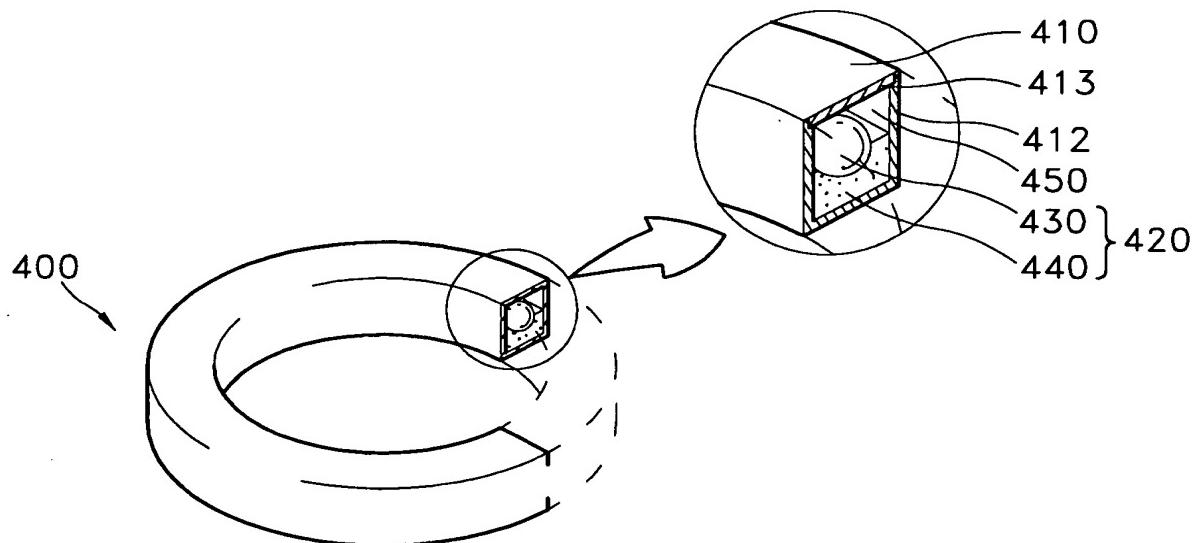
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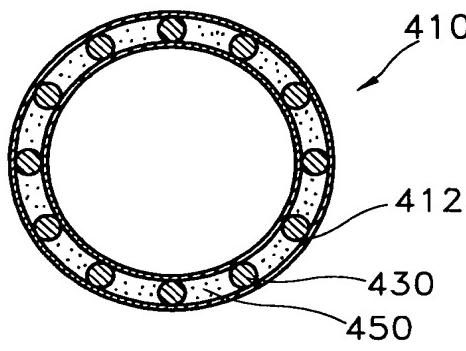
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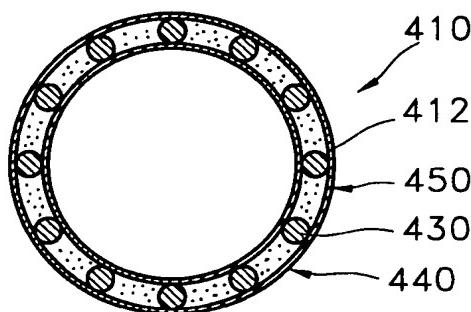
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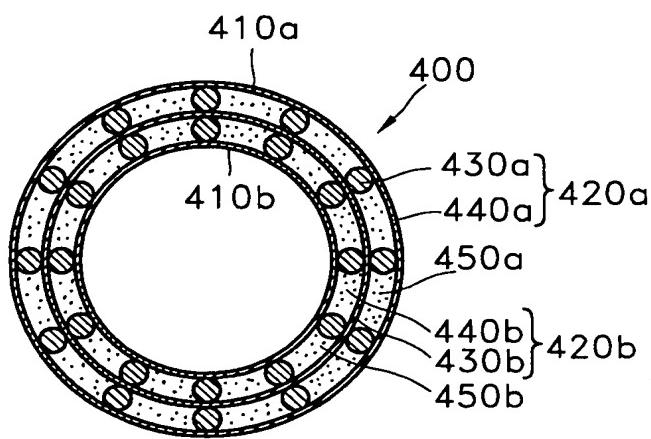
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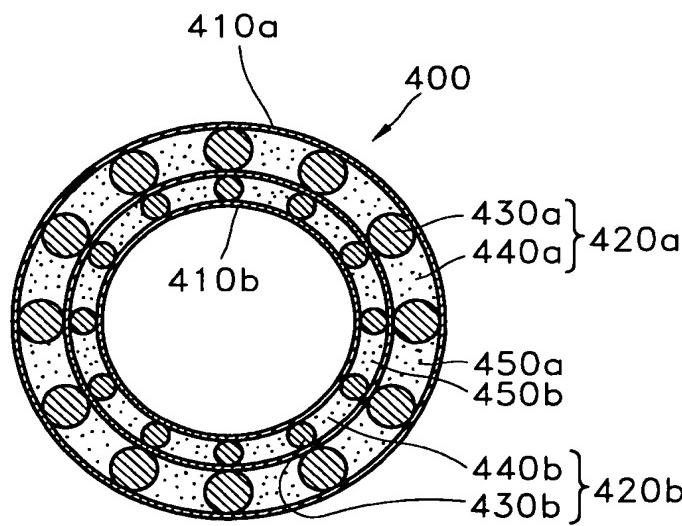
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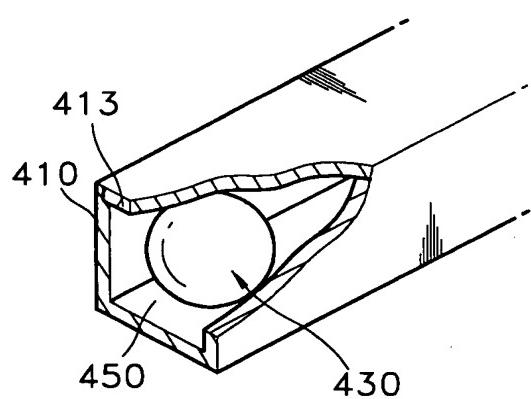
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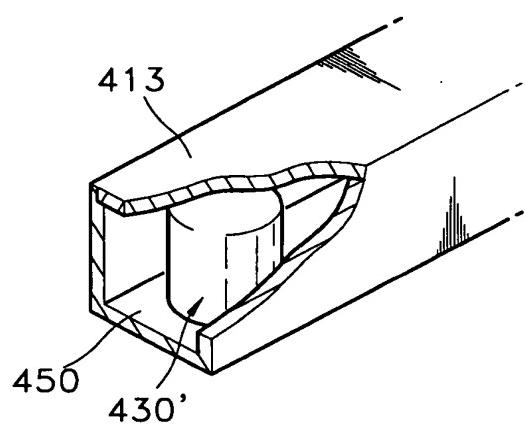
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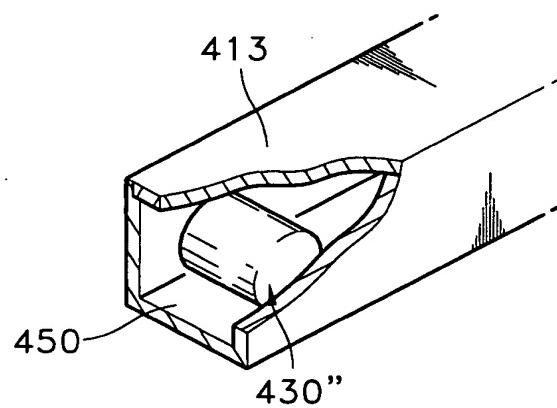
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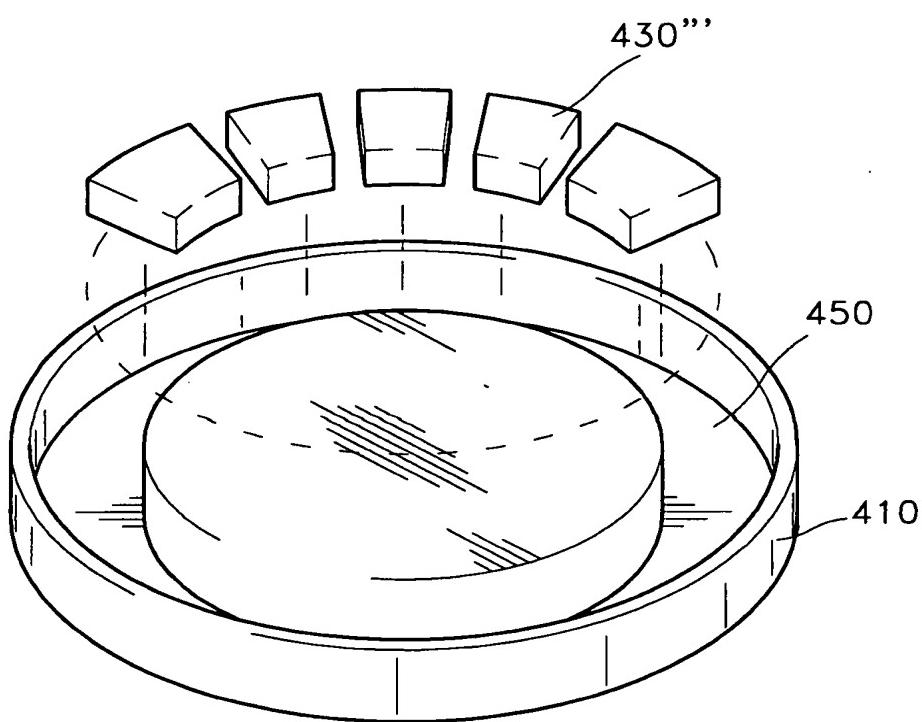
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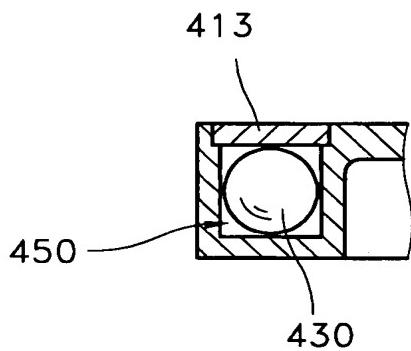
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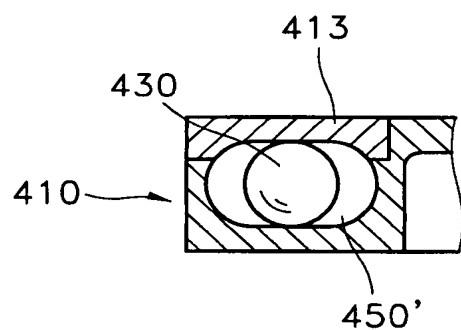
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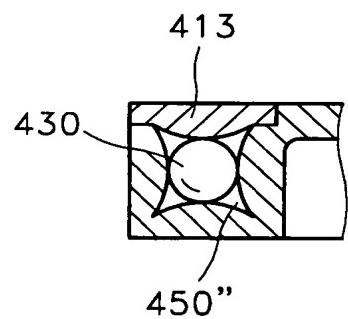
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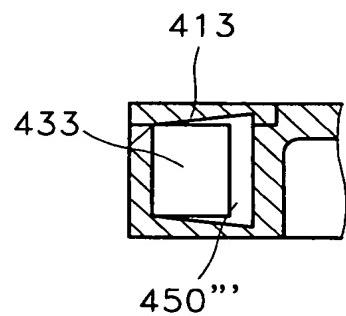
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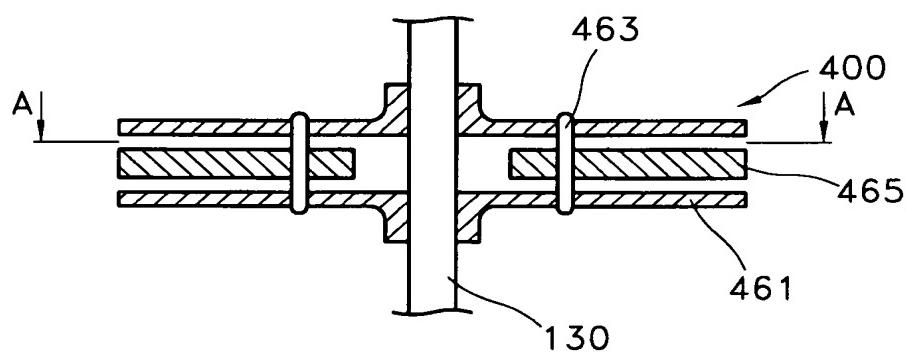
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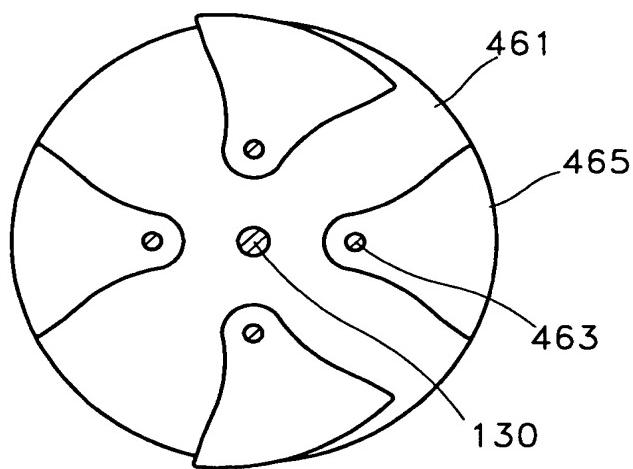
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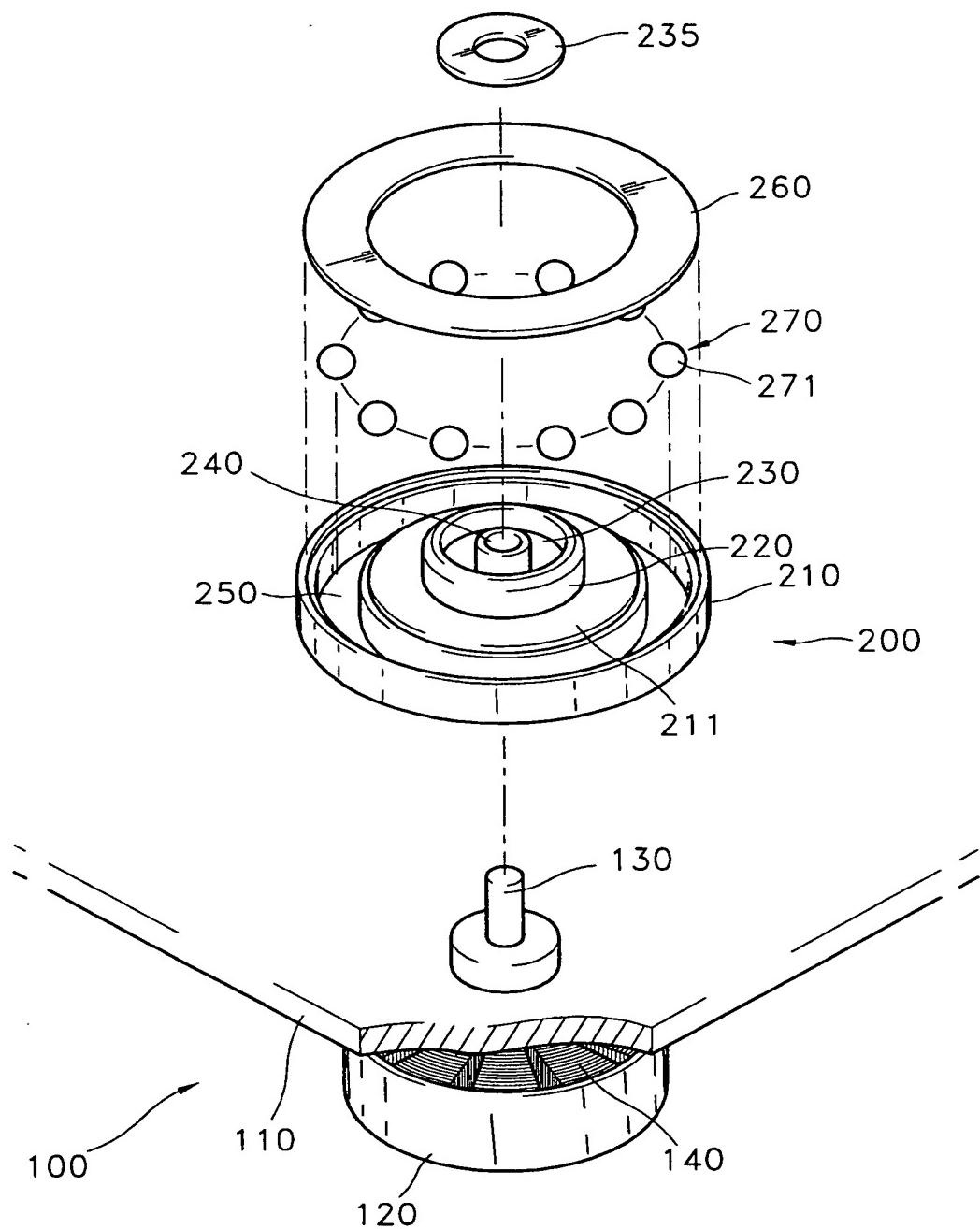
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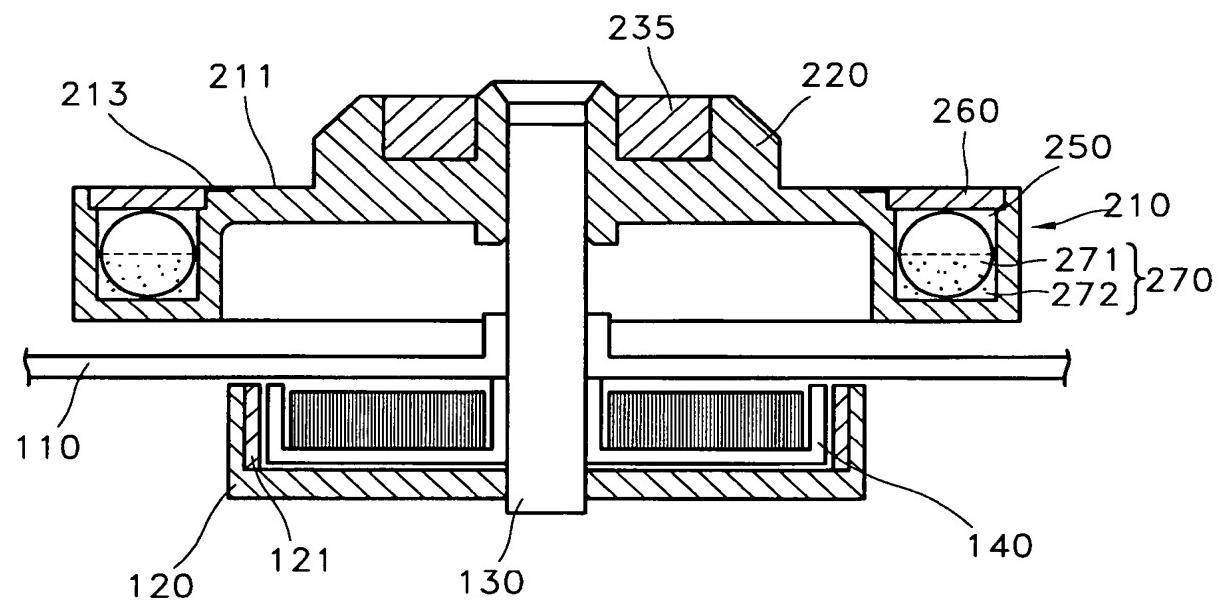
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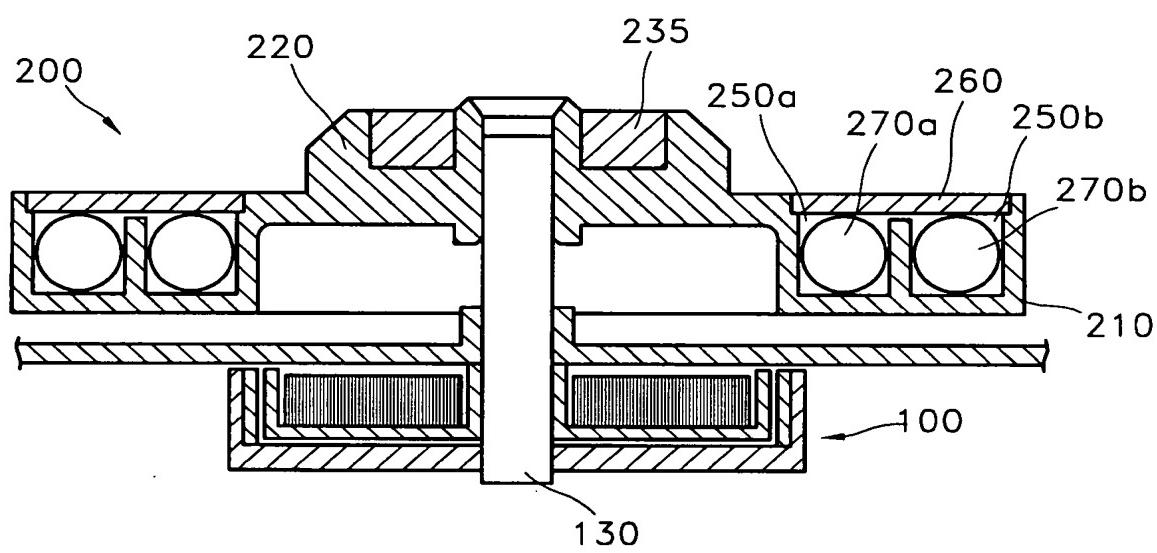
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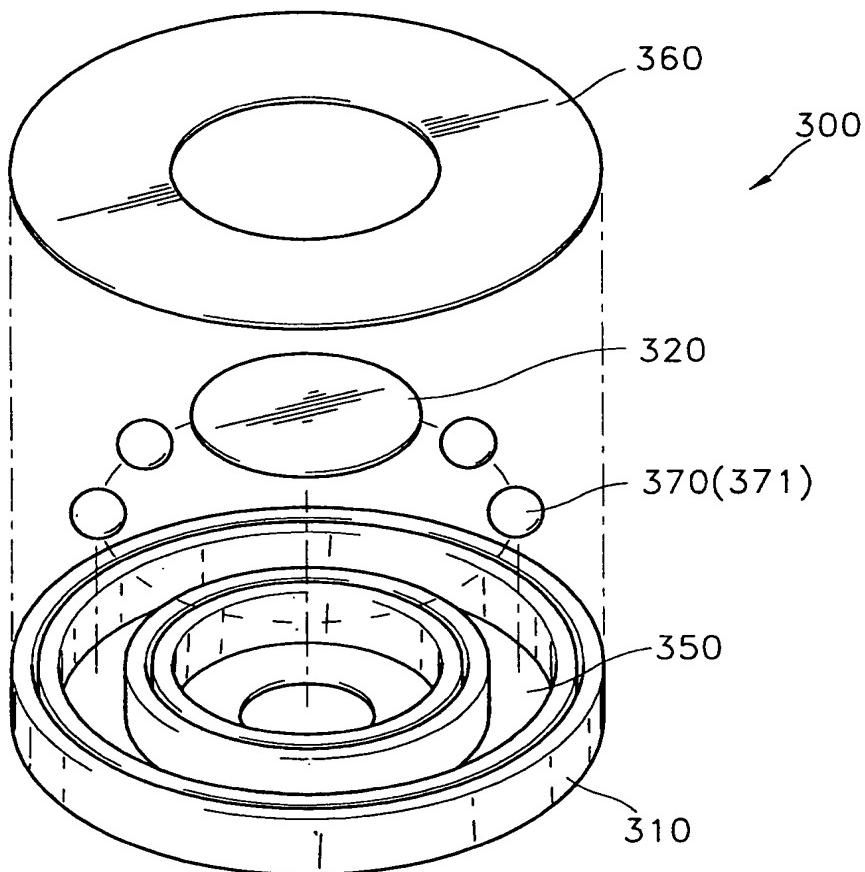
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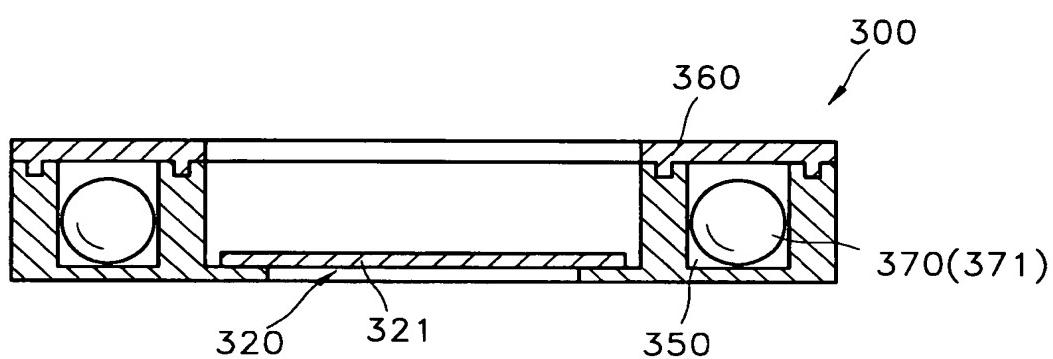
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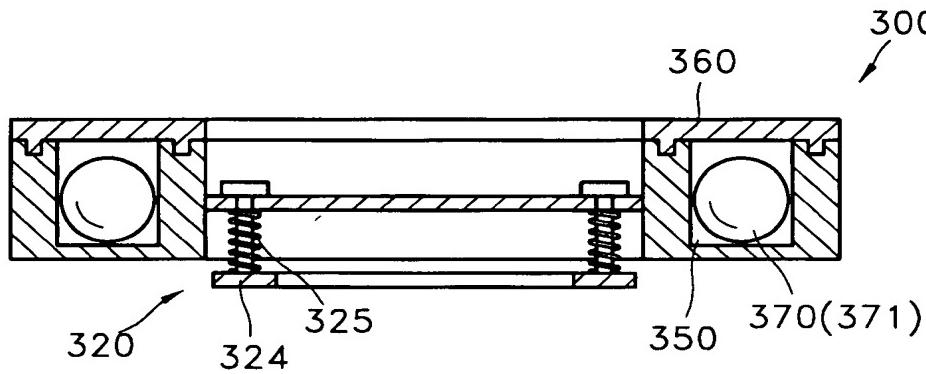
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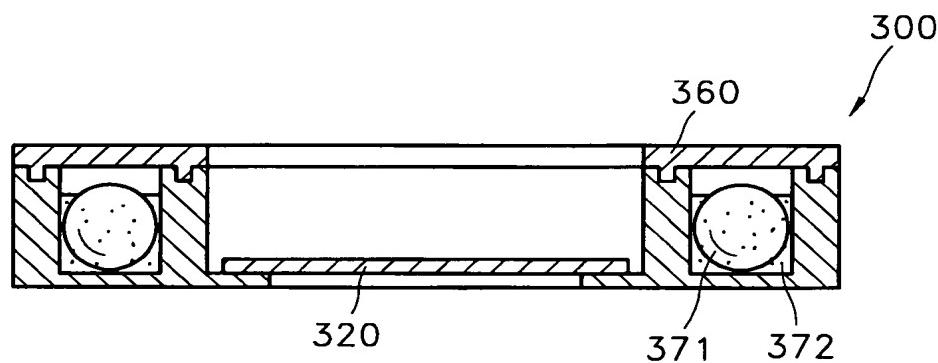
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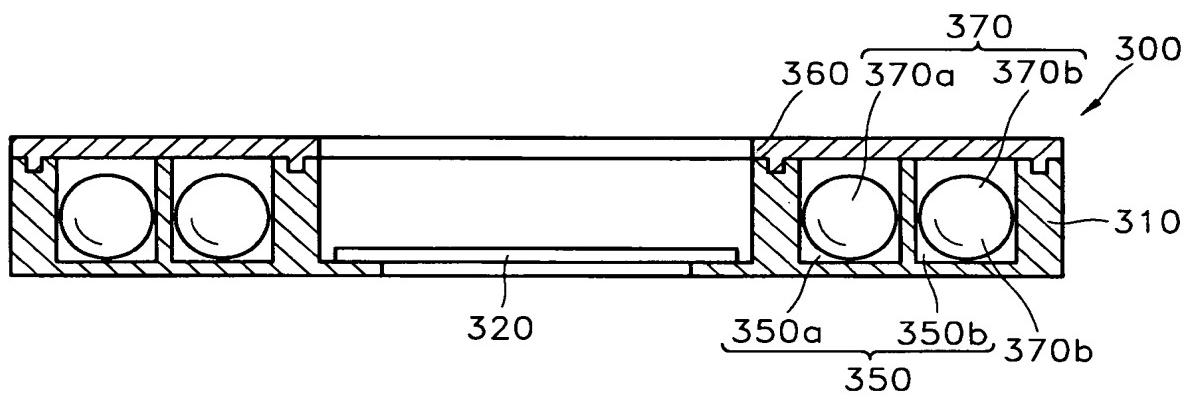
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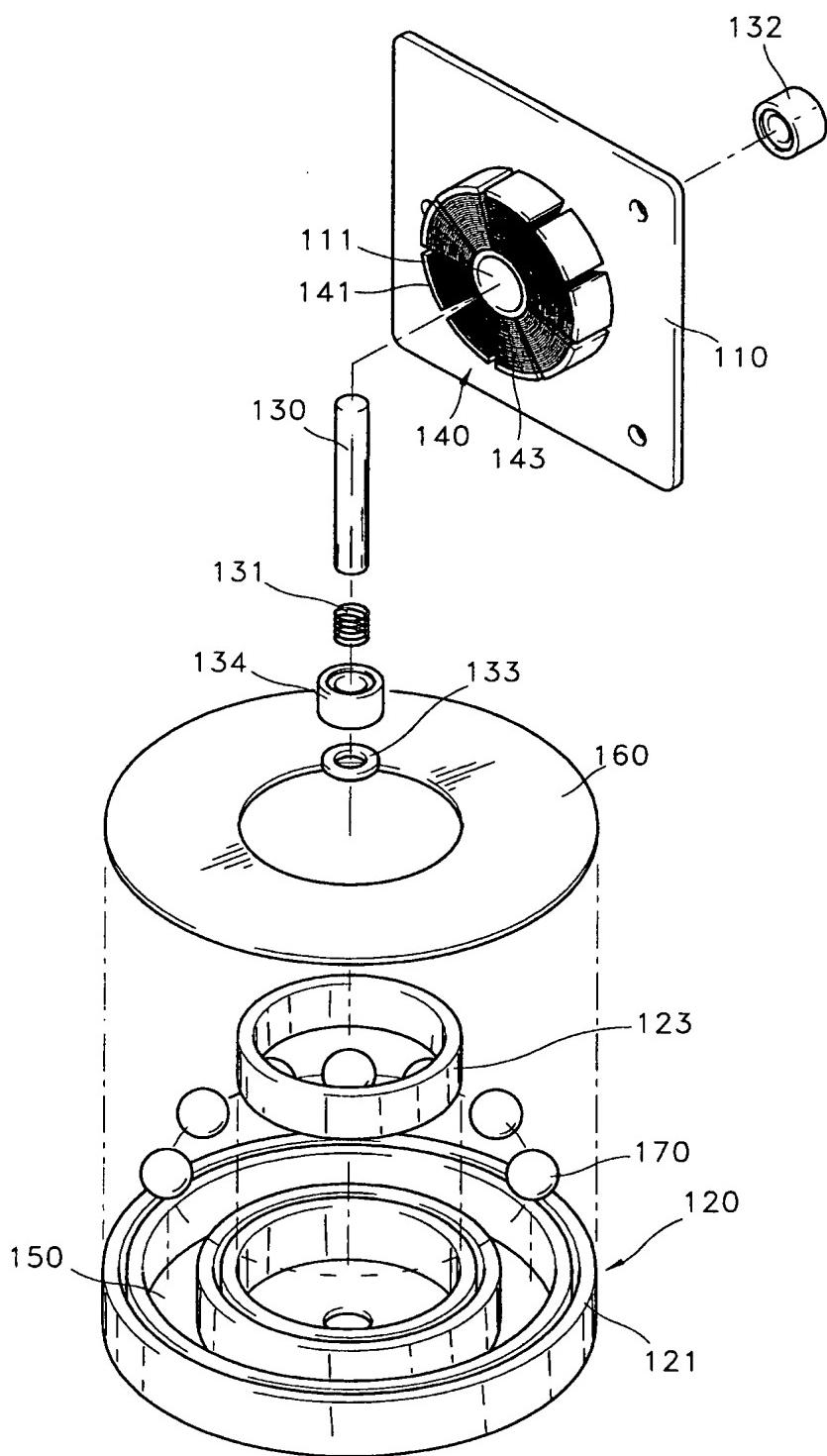
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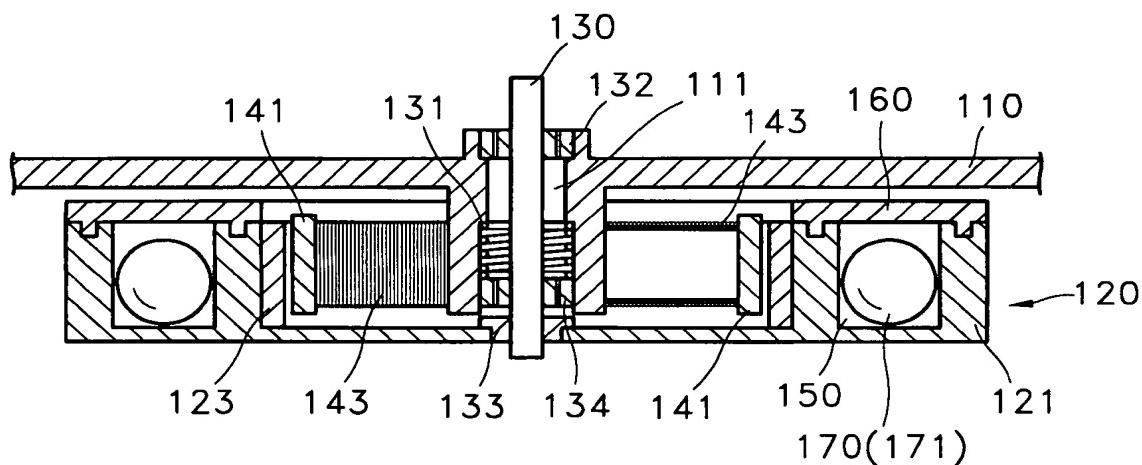
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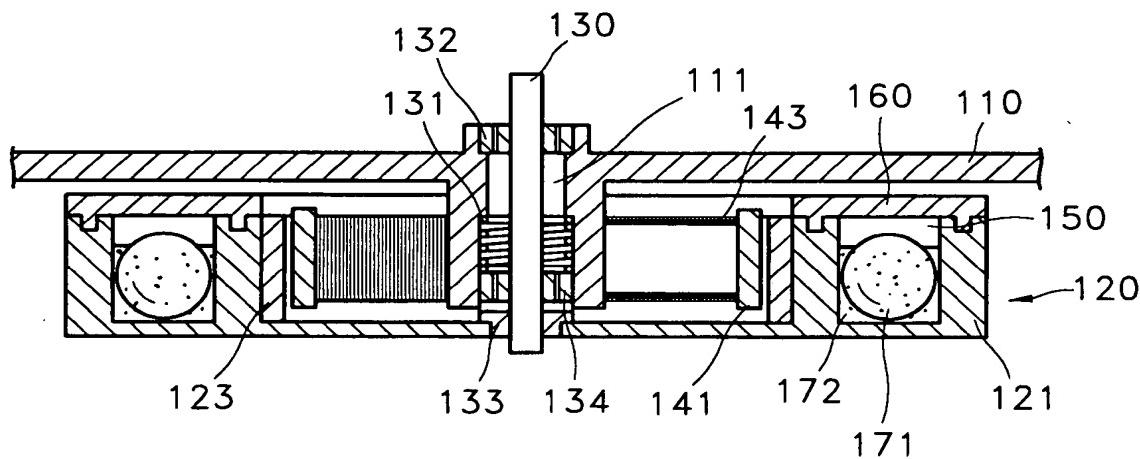
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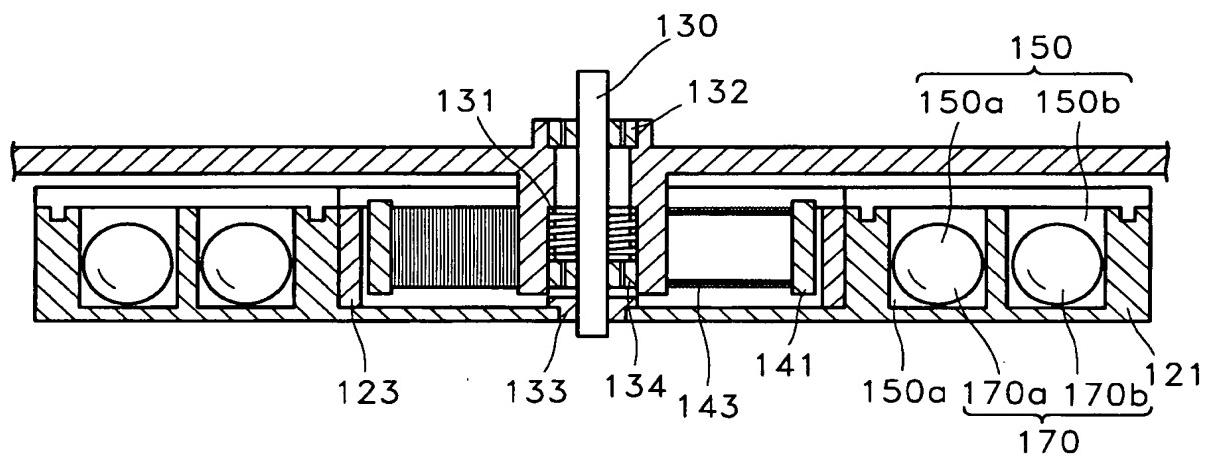
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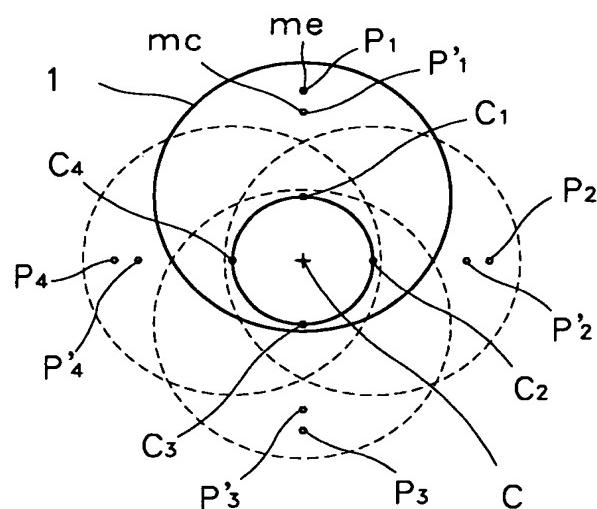
도면29



도면30



도면31a



도면31b

